

Plantemic: A Philosophical Inquiry and Storytelling Project
about Human-Plant Co-Existence during the COVID-19
Pandemic

by

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Submitted to OCAD University in partial fulfillment of the requirements for the degree of
Master of Design in Strategic Foresight and Innovation
Toronto, Ontario, Canada, 2020

Abstract

The COVID-19 pandemic in 2020 has created a particular shared human condition. Never in recent history have we spent so much time social distancing at home, living and working in relative isolation. For many of us isolating at home, our beloved and loyal houseplants became our sole companions; our existence interlaced with our houseplants, who are also living, breathing, possibly working, grieving, and connecting in times like this.

This project undertakes a philosophical and creative inquiry inspired by human-plant co-existence during this time of uncertainty and crisis. Specifically, it asks how might we understand human-plant relationships during the COVID-19 pandemic; and in particular, what might this indicate about our sense of our existence? Answering this question involved designing research methods that collected qualitative data on human-plant relationship during the pandemic and the making of *Plantemic*, an animated web series that tells the stories of the pandemic from fictionalized plant characters' perspective.

In this journey, I have navigated discourses in design, foresight, media studies, psychology and philosophy. I explored how futurist storytelling should be re-approached in a time when we are experiencing thorough disruption and existential angst. To this end, I sought inspiration from love letters and break-up letters that plants' human friends submitted as part of this project in order to uncover a story about connection, intimacy and acceptance between human and plants during the pandemic. Ultimately, I hope to present to you, through this report and the animated web series, that to make sense of our existence and to reorient ourselves, we must accept and cherish existence as not something solely puts humans at the centre, but rather existence as the transcorporeal, interconnected, and co-created existence with plants and by extension nature.

Acknowledgement

As an immigrant woman living in Tkaronto, I am extremely grateful to have had the opportunity to study, work, and build a life on this land that is the traditional territory of many nations including Mississaugas of the Credit, the Anishnabeg, the Haudenosaunee and the Wendat peoples and is now home to First Nations, Métis, Inuit and many BIPOC communities and people. At this time of global pandemic, I also want to acknowledge my extreme privilege to have the time, space and support to pursue this research project.

To my mom, who is the original plant care-taker at my home and continues to inspire and nurture me every day with her resilience. I owe everything that I do to you.

To my generous, imaginative, and inspiring advisor, Suzanne Stein. Without your encouragement and support, I would not have had the courage to pursue my whimsical ideas. You guided me to trust my instincts and broaden my horizon of imagination.

Thank you for my secondary advisor Patrick McCurdy to have taken a leap of faith in this project after a brief and exciting email exchange and has since supported me with kind and helpful guidance every step of the way. Thank you my fearless *Plantemic* production team – Joyce, Tony, Aram, Lillian and Joseph. Your creative genius and labour are what will bring *Plantemic* to life.

Thank you for my dad for providing creative brainstorming support and always encourage me to deepen my academic and artistic inquiry.

Finally, thank you Yang, my dearest partner and friend. Thank you for always providing humour and comfort when I am stuck in existential lows. I will always remember that one of the initial sparks for this project came from you sharing with me how you think my plants are having a funny conversation about adapting to their new home after you took me and my plants in at your place at the beginning of the pandemic.

Oh – and to my plants! If you can hear me (I know you can), thank you pals. You are amazing. Keep on growing. I cannot wait to see what else you will seed in the world.

This work was supported by Mitacs and FilmLoft Media Inc. through the Mitacs Accelerate Program. Thank you Mitacs and Filmloft Media Inc. for supporting this project.

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Chapter 1. Introduction

I was not a plant lover pre-pandemic.

Before 2020, I would categorize myself as an adequately responsible plant owner. I, like many single working professionals, live in an urban jungle. The closest exposure I have with nature are the houseplants that my friends gifted to me over the years. But truth be told, I was not obsessed with my plants. In fact, every summer, when my mom visited me and stayed at my place, I happily handed over the plant care-taker role to her. When she leaves, she always reminds me of the minimum care routines that I need to follow to keep the plants alive while I juggle with my busy life.

When the COVID-19 pandemic hit Canada in March 2020, I temporarily relocated outside of the city to unite with my boyfriend. Within a week, the management at my condo building informed me that there was a COVID case inside the building. With caution, I didn't return to my condo unit until 2 weeks after.

It was during those two weeks that for the first time, I felt the fear of losing my plant babies. In a time that we live in the uncertainties of pandemic and wake up to news about a number of deaths, losing my plants would be just another blow on the already shaky state of mind that I had.

To my surprise and delight, when I returned home 2 weeks later, all my plants were intact.



Figure 1: Plants in Betty's apartment after two weeks

Bathing in late spring sunshine, my houseplants showed resilience and grace, in a time that I need to be reminded of the strength of life and living. I silently promised to them, from this day on, I would cherish them with all my heart and stop taking them for granted.

I am not alone.

Since the pandemic, there has been an outpouring of stories online about people isolating themselves in their homes and deepening their connection with their indoor plants or plants in general. For instance, facing lockdown and uncertain about her professional future, Filipino Canadian writer Catherine Hernandez started what she calls as her “apocalypse garden” and take learnings from her planting process that further informs her artistic practice (Hernandez, 2020).

Underpinning this deepened relationship with plants is an outcry about the existential condition that the pandemic has put us in. By all accounts, the COVID-19 pandemic has swept the world with devastating impact, economically, socially as well as on physical, and mental health. In a report about resilient strategies, Harvard University calls the COVID-19 pandemic “a profound threat to [American] democracy, comparable to the Great Depression and World War ii” (Allen, Block & Gostin, 2020). For many of us, isolating at home and without much in-person social connection, the systems that we rely on to produce meaning and a sense self-worth are being disrupted. For one, our productivity has plummeted. Nicholas Bloom, an economist who had previously championed the benefits of working home, was warning the public about potential productivity pitfalls at the beginning of the pandemic (Gorlick, 2020).

What’s left in our everyday is the surplus of time to face with our worst fear: the potentiality of death and the uncertainty of the futures we hold. As researcher and psychotherapist Paddy Farr aptly summarizes:

The threat posed by COVID-19 brings one face to face with one’s deepest existential angst: Yes, you shall die; yes, you are responsible for your actions that brought you here; yes, you must face this alone in the end; and yes, your entire life has no meaning in the face of this threat. (Farr, 2020, p.3).

In a time that meaning of life is depleted, many of seemed to have turned to plants. Plants’ therapeutic power is so well-recognized that when the Barcelona Orchestra reopened in late June 2020, it dedicated its first concert to a full house of houseplants and then gifted these houseplants to front-line health workers (“Barcelona Opera Reopens”,

2020). See a photo captured at the scene included in the link cited in the Bibliography section.

There is something incredibly beautiful and absurd at the same time when we look the imagery of a well-groomed and well-rehearsed orchestra performing to a full house of plants in an exquisite music hall. On one level, the absurdity screaming out from this imagery is reminiscent of the existential absurdity found in many modern and post-modern literature and arts. Paddy Farr, the psychotherapist quoted above, argued that in order to survive the pandemic, we must embrace the spirit of the absurd heroism in *The Myth of Sisyphus* by Albert Camus, a canonical essay about existentialism and nihilism, wherein the protagonist Sisyphus endlessly pushing a rock on an upward slope (Camus, 1965). In the realm of theatre, there is Samuel Beckett's *Waiting for Godot*, a tragicomedy wherein nothing really happens except the two protagonists waiting for a mysterious Godot character that never shows up (Beckett, 1954). In recent popular media, there is the Netflix series *Bojack Horseman*, an animated tragicomedy sitcom about a humanoid horse loathing in his past glory as a sitcom actor in Hollywood (Waksberg, 2014).

Can we then say the stories about human-plant relationship emerged from this pandemic are a continuation of this well-established lineage of absurdist, existential tales? Not quite. When Catherine Hernandez talks about her "apocalypse garden," she expresses fear about the uncertain future as much as she talks about the hope that her plants have seeded for her (Hernandez, 2020). In that image of the Barcelona Orchestra playing to a full house of plants, there is warmth as much there is an absurdity, as we know that each of the plants will go on providing comfort for front-line workers.

There is something powerful about our relationship with plants that renders our response to our existential condition hopeful and sincere. As a foresight researcher and storyteller, this phenomenon intrigues me as it gestures towards the possibility for healing and resilience in a time that we live with a flood of dystopian projections of the future.

In this research and research-creation project, I embark on an exploration centering on this question: how might we understand human-plant relationships during the COVID-19 pandemic; and in particular, what might this indicate about our sense of our existence?

As you will see, my way of tackling this question involves a two-phase approach. First, informed by existing literatures on human-plant relationship and primary data I gathered from plant lovers, I embark on a philosophical inquiry that looks into what it means for us to

be co-existing with plants during this time of social isolation and what affects and meaning does that relationship bring about. Then, integrating the insights from this inquiry to a character and scenario creation process, I begin the making of *Plantemic*, a five-episode animated web series that re-enact the unfolding of the COVID-19 pandemic from a group of houseplants' perspectives.

I invite you to go on this journey with me and read some amazing human-plant stories throughout. Here are some guiding light posts for what you can expect:

I will start with a literature review chapter that examines existing literatures on the health-related benefits of houseplants, generational significance of plants, and the philosophical frameworks for understanding human-plant relationship. The insights from the literatures will ground my approach to the philosophical and creative exploration of human-plan co-existence.

In the methodology chapter, I provide background and rationale for my methodology on philosophical inquiry and storytelling creation. I consider the role of storytelling in design disciplines as well its affect discussed in media studies and psychology. From there, I adapt an existing experiential futures creation process to lay out the steps for the research-creation process.

In the findings and analysis chapter, I will share the findings from collecting anonymous love letters and breakup letters that human participants have written to address their plants. I will distil the findings through a user persona mapping exercise and discuss the insights emerged about human-plant relationship and the existential meanings that plants bring to human lives during the COVID-19 pandemic.

Inspired by the findings and insights, in the making of *Plantemic* chapter, I outline the creative process for making an animated web series that recounts the daily lives of the pandemic from houseplants' perspective and highlight some key factors that I consider throughout the process.

Finally, I arrive at the conclusion chapter and provide some of my reflection on the research and creation process and point out areas for further research.

Ultimately, I hope to produce research and research-creation that leverages the power of storytelling to provoke playful reflection and mediation of the pandemic times and existential meaning post-pandemic. This project perfectly synthesizes my academic background in cinema studies, design research and foresight research and my artistic practice as a film

writer and director, and I acknowledge my privilege to have had the opportunity to embark on this exploration at this time.

Chapter 2. Literature Review

To understand how the human-plant relationship can potentially support the ways we respond and build relationships with our existential crisis, I first conducted a literature review to look at how have the existing discourses in different disciplines contextualize human-plant relationship. By in large, existing literatures that discuss human-plant relationships fall under three zones of focus:

- Health Related benefits of Houseplants ,
- The Generational Relevance of Houseplants , and
- The philosophical frameworks for understanding human-plants co-existence.

In this chapter, I provide a review of each of the zone of focus, summarize the main insights, and discuss the theoretical leaning of this project and how might this project explore and contribute to some of the existing discourses.

Health Related Benefits of Houseplants

Most of the studies done on the health benefits of plants explicitly and implicitly take into account the modern, urban, and 9 to 5 working lifestyle. There is significant evidence showing that potted house plants can help improve air quality indoors (Papinchak, Holcomb, Best & Decoteau, 2009; Tarran, Torpy & Burchett, 2007). Putting indoor plants in a workspace gives workers the opportunity to take breaks from looking at their screens, and the act of caring for plants encourages physical mobility after long hours of sitting, strengthening workers' productivity and mental wellbeing (Bringslimark, Hartig & Patil, 2007; Raanaas, Evensen, Rich. Sjøstrøm & Patil, 2011). Indirect mental and physical health benefits of houseplants include “anxiety and stress reduction, attention deficit recovery, fractals and visual responses, decreased depression, enhanced memory retention, greater happiness and life satisfaction, mitigation of PTSD, increased creativity, enhanced productivity and attention, reduced effects of dementia, and improved self-esteem.” (Hall & Knuth, 2019, p.1).

Houseplants and indoor plants provide a much-needed compliment to urban lifestyle that is more and more disconnected with nature. In countries like Japan, there are regular practices of “nature therapy” that involve encouraging participants to increase the number of indoor plants they own or go to indoor green spaces when accessing nature might be difficult (Song, Ikei & Miyazaki, 2016). This popular method of employing indoor plants to

treat human-nature connectedness is gaining traction at the same time that there is an ongoing debate about “nature deficit disorder”. The term “nature deficit disorder” was first coined by American writer and journalist Richard Louv in 2005 to raise awareness that young people are gradually and point out the correlation to learning in nature and potential increase in interest, attention, and information retention (Louv, 2005; Louv, 2009). Since then, there have been both popular and scholarly discussions. Some have focused on how to address or cure nature deficit disorder (Ming Kuo, 2013; Warber, S. L., DeHudy, A. A., Bialko, M. F., Marselle, M. R., & Irvine, K. N, 2015), while critics like Elizabeth Dickinson call “nature deficit disorder” a misdiagnosis that obscures the problem and takes away attention to factors to consider in a deeper cultural psyche (Dickinson, 2013)

For the purpose of this project, the key takeaway from this ongoing discourse about nature deficit discovery is the general acknowledgement that we live in age with a high degree of nature-disconnectedness and that indoor plants can remedy that disconnectedness. In the Findings and Analysis chapter, I will discuss ways in which connectedness with plants help support humans to re-establish their sense of connection in general.

Generational Relevance and Symbolic Significance of Houseplants

In recent years, there is an ongoing discussion in journalistic literature on the growing popularity of houseplants. In April 2018, *The Economist* published a telling chart that showed growing interest for searching up houseplants (“Instead of Houses, Young People Have Houseplants,” 2018). Many attributes the surge of houseplants' popularity to the millennial generation and beyond (Bond, 2019; Vincent, 2020). According to the 2019 National Gardening Survey conducted in the United States, a quarter of the total spending for gardening retails were contributed by young people between the age of 18 to 34, a demographic that is experiencing higher growth rate in this area than any other age demographics (2019).

Journalistic literature has made conjectures on why young people are drawn to houseplants. On one level, the physical and mental health benefits that houseplants bring, as mentioned in the last section, are attractive to young people who are also increasingly paying attention to self-care and wellness. On another, many suspect because millennials and Gen Z are “settling down” later in life, meaning they’re forming families, having children, and purchasing properties later, they’re looking for something else other than family and marriage to give them a sense of fulfillment, comfort, and nurture, and houseplants fit neatly

into that schema (Baggs, 2018; Bond, 2019). Nonfiction writer Alice Vincent, in her opinion piece on *The Guardian*, calls the growing popularity of succulents “the perfect fad for a rootless generation” (2020).

There is much to unpack about this association between houseplants and young people’s generational attitudes and lifestyles. While there is a clear indication of young peoples’ increased spending on houseplants and their related products, it must be noted that almost no scholarly literature has been written about the correlation between young people’s life choices and their love for plants. Underlying the assertion that young people living in urban settings are drawn to houseplants because they are settling down later in life is the assumption that there is a universal yearning for stability in life, an assumption that can be problematic when considering the diversity of life pursuits that people have. The key takeaway here is that there is a general consensus of what houseplants bring to urban living: comfort, care, stability, and companionship. How do those meanings get played out in times of the COVID-19 pandemic? That will be one of the questions I investigate and unpack in the findings and analysis chapter.

The philosophical frameworks for understanding human-plants co-existence

Way before the Barcelona Orchestra decided to play music to plants and treat them as important as human audiences (“Barcelona Opera Reopens”, 2020), in the realm of cultural studies, there was already an ongoing discourse about recognizing plants and nature as equal contributors and participants of our collective existence.

One such theoretical lens is transcorporeality. Transcorporeality explores the interconnectedness, entanglement and fluidity of human and other-than-human-beings, and challenges the duality between human and non-human-beings. As Stacy Alaimo puts it in her seminal work on transcorporeality, “human corporeality...is inseparable from ‘nature’ or ‘environment” (2008, p.2). Cultural studies scholars have now applied transcorporeality as a framework to reframe our perspective on time, space and ecology. Atrida Neimanis and Rachel Lowen Walker, for example, argue that the dominant narrative on climate change and environment often position nature, environment and climate as something that humans either have control over or occupy in them. The ethos of “stop climate change” assumes that human interaction with nature and climate take place on a linear timeline of past, present, and future. Instead, Neimanis and Walker call for the recognition of our transcorporeal existence and interaction and intra-action with nature and climate. They urge

us to think about human's relationship with nature in "thick time...a transcorporeal stretching between present, future and past, that foregrounds a nonchronological durationality" (Neimanis and Walker, 2014, p.561).

Though not speaking from the school of ecofeminism like Neimanis and Walker, literary scholar Timothy Morton, in his books *Ecology without Nature* and *The Ecological Thought*, also echo a similar sentiment on how we should conceptualize human-nature relationship. Morton argues that the dominant, Western imagination of "nature" is that of the other, to which human can do things to, and until we can shift our imaginary of nature and recognize nature's active agency in the interconnectedness between nature and humanity, we will inevitably fall for the paradoxical trap of trying really hard to save nature all the while objectifying it (Morton, 2007; Morton 2012).

I am inspired by the discourse of transcorporeality and would like apply the lens of "thick time" to understand the COVID-19 pandemic as it urgently calls for non-linear reconceptualization of time. Since the pandemic, many of us around the world have been living with what journalist Arielle Pardes calls as the "quarantine paradox": for those of us socially distancing at home, days feel longer to pass but add up to very little meaning, while for those working at the front-line, time is precious but with each month that the pandemic prolongs, days and weeks feel increasingly heavy and long (Pardes, 2020). Time, therefore, is already not experienced as linear progression or unfolding of events. If we were to locate the human consciousness and its interconnected with indoor plants or nature during the pandemic, we must recognize time is not an objective clock but rather subjectively emerged from the daily interaction and intra-action human have with their transcorporeal companions, and in this case, with their dear plants.

As a filmmaker, I approach this exploration of transcorporeal relationship through screen-based storytelling. In the next chapter, I will extrapolate on the methodology for the research and research-creation, considering the role of storytelling in these times with context in design, media studies, and psychology.

Chapter 3. Methodology

To narrow down methods and processes for my research and research-creation, I explore a range of disciplines and consider the role of storytelling during this global pandemic.

In the realm of design and foresight studies, storytelling plays the role of provocation, bridging imagination of the future with alternative visions of the present. There are several co-evolving terms that describe using storytelling to provoke imaginations of possible futures. Design fiction, for instance, a term coined by science fiction writer Bruce Sterling in 2005, uses films, arts, prototypes, and artifacts to provoke dialogues and exploration of possible images of the future (Bleecker, 2009; Dunne & Raby, 2013; Lindley & Coulton, 2015; Sterling, 2009). Similarly, Experiential Futures uses storytelling to conduct foresight research. Stuart Candy and Kelly Kornet describe Experiential Futures as a process of making individual and communities' subconscious imaginations of the futures visible, tangible, and interactive, and thereby potentially alter the current course of action by participants of the experience (Candy & Kornet, 2017). There is also Speculative Design, a design discipline spearheaded by designers Anthony Dunne, Fiona Raby and researcher James Auger. Speculative design builds on people's current conceptualization of the world to create an experience or narrative that speculates on the possible intersection between technology, design and humanity (Auger, 2013).

These sub-disciplines of design and foresight often play in the space between the familiar and the strange, the real and the imagined, and the expected and the uncanny. When traveling to possible futures, they also are often concerned with the role of technology in our everyday lives (Bleeker, 2009; Dunne & Raby, 2013; Auger, 2013). As James Auger summarizes, "a design speculation requires a bridge to exist between the audience's perception of their world and the fictional element of the concept," (2013, p.2). Candy and Kornet further this argument by elaborating that the fictional, strange, imagined, or uncanny part of the designed conceit, provocation or experience does not come from a vacuum but rather already exists within the subconscious of the people and communicates. The designers and the futurists' job are to tease out these imaginations and render them explicit and tangible (Candy & Kornet, 2017).

I celebrate the spirit of design fiction/speculative design/experiential futures and hope to use storytelling to provoke critical reflection of their lives and possibly, imagination of the post-pandemic world. However, in the context of global pandemic, I must also problematize

these design disciplines' usual approach as it assumes that people will have the emotional and cognitive capacity to engage with storytelling about their possible futures and subsequently embrace changes in their present. In this prolonged pandemic when people wake up to the number of death counts every day and do not know the next time they can hug their friends or love ones, there is no distance to bridge between the familiar and the strange, the real and the imagined, and the expected and the uncanny. In some way, the unimaginable, dystopian tale has already taken place. As researcher and therapist Paddy Farr argues, the COVID-19 pandemic triggers existential anxiety as it forces people to confront with death, isolation, nothingness, and meaninglessness (Farr, 2020). A recent study on people's mental health in quarantine support Farr's argument. Psychologists found the emotional outcomes associated with quarantine life include stress, depression, insomnia, anger and fear (Pfefferbaum & North, 2020).

In a time that our collective subconsciousness is stressed and potentially traumatized, I argue that storytelling must first and foremost be empathizing and healing in order to reorient people to sense-make about their world and themselves. Stories about plants have this reorientation and healing potential. In her book *Affective Ecologies: Empathy Emotion and Environmental Narratives*, literary and film scholar Alexa Weik von Mossner argues that environmental narratives, which she defines as narratives in any media form that concerns the with issues of the environment or human-nature relationship, brings about an embodied cognition processes by provoking bodily affects that then get processed as desire and emotion towards the environment and nature (Weik von Mossner, 2017). The study of embodied cognition is rooted in the study of modern philosophy, linguistics, and psychology. Embodied cognition provides a critique on the idea that the mind necessarily controls the body and instead recognizes the body's importance in impacting the cognitive processes of the brain and/or the mind (Wilson & Foglia, 2017). The study of embodied cognition is also interconnected with study of affect theory. By affect, I adopt philosopher Baruch Spinoza's definition of affect, meaning "affections of the body by which the body's power of acting is increased or diminished" (1994, p.154). Contemporary affect scholars such as Melisa Gregg, Gregory Seigworth and Sarah Ahmed have extended Spinoza's definition of affect to look into the exchange of desire, emotion, feeling, and sensation between human and non-human things, objects, and texts (201). In Weik von Mossner's case, she adopts affect theories and has explore the affective potential of environmental narratives (2017).

The study of embodied cognition and affect gesture towards the healing potential of storytelling. Rather than solely focusing on reason, rationality and causality, storytelling can also invoke affects and sensations that allow our body to sense and feel, which can in return change the way we think and perceive. Indeed, in their clinical practices, therapists heavily rely on the function of storytelling to guide their clients to negotiate their transformation from trauma. In their seminal book on healing trauma, *Waking the Tiger*, psychologists Peter Levine and Ann Frederick discuss using re-enactment and visualization for people who experienced trauma to renegotiate their position and physically feel a sense of agency in the recounting of traumatic events. At the same time, they also warned the risk of storytelling, as recounting trauma can be potentially a re-traumatizing experience (Frederick & Levine, 1997).

For Levine and Frederick, the process of healing should be fluid and spontaneous, rather than rigid and hyper-structured (1997). As I think about the style and tone of the research-creation, I bear this reminder for fluidity and flexibility in mind and also explore the role of humour and playfulness. In the last few decades, psychologists have studied and highlighted the role of humour in easing life stress and anxiety, especially when coping with difficult situations and trauma (Abel, 2002; Lefcourt & Martin, 2012). In the practice of therapy, therapists also value humour as an effectively communication tool with their clients (Dziegielewski, 2003). For this project, I will explore different types of humour in the iterative creation process. At times, it will be analogous to the dark and absurdist humour found in existential literatures like *Waiting for Godot* (Beckett, 1954). At times, the humour is slapstick humour that serves to provide a comic relief. I opt for this flexible approach with humour with the hope that the piece will provide moments of relaxed laughers and moments for serious reflection as well.

Taking all these into account, I will create an episodic web series that re-enact the story about the pandemic from houseplants' perspective. How has the pandemic been for our beloved houseplants as they live through the social distanced lives with us? The concept of this project is to highlight the interconnected between human and plant transcorporeal existence (Neimanis & Walker, 2014). The intended impact is to bring about stress-relieving affect like laughers, hope, and desire and thereby invite playful reflection on and mindful reorientation in our collective existence. The tone of the piece will be light-hearted and humorous. The episodic nature of the series will allow for recounting of plants' everyday encounters during the pandemic. The web distribution method will be accessible for wide

audience consumption especially considering the fact that by the time the piece is released, there is a high possibility that we will still be living in a socially distanced condition.

In terms of the process for making the research-creation, I modify the steps that futurist Stuart Candy and Kelly Kornet outline for creating ethnographic experiential futures by taking into consideration the aforementioned factors.

The process that Candy and Kornet outline for creating ethnographic experiential futures experience is as follows:

1. MAP: Inquire into and record people's actual or existing images of the future (e.g. possible; probable; preferred; a combination).
2. MULTIPLY: Generate alternative images (scenarios) to challenge or extend existing thinking (optional step, but recommended).
3. MEDIATE: Translate these ideas about the future/s into experiences: tangible, immersive, visual or interactive representations.
4. MOUNT: Stage experiential scenario/s to encounter for the original subject/s, or others (or both).
5. MAP: Inquire into and record responses to the experiential scenario/s (Candy & Kornet, 2017, p.11).

The modified process that I used is as follows:

1. Map: I am going to first inquire into human experience with plants during the pandemic. Instead of focusing potential versions of the future, I am going to focus on the different emotions and meanings that human derive from their relationship with plants. Some methods I use at this stage include:
 - a. Love letter/breakup letter - through an online survey form, I collected 20 anonymous love letters and breakup letters from plants owners. These are letters that they have written addressing to one or more of their houseplants. 90 per cent of the plant owners who submitted letters live in an urban setting, The online survey form was sent to various community groups that ensure diversity in the sampling population. Factors that were considered in the survey form include the plant owners' residential types (condo/apartment/house), neighbourhood types (rural/suburban/urban), the number of plants they live with, and their association with the identity as plant lovers.

- b. User persona mapping – analyzing the primary data gathered from love letter/breakup letter collection process, I map out the different persona of plants’ human friends and roommates. Note that I am refraining from using terms such as “plant owners” in this process as those terms necessarily establish human’s superiority over plants. The user persona mapping exercise will allow for insights to emerge about the different stages of human-plant relationship and what might be the evolving factors involved.
 - c. Empathy Map – empathy map is a user experience and interaction design research method that looks into how different users might say, think, feel, and act in different scenarios (Gibbons, 2018). From the data collected from the love letter/break-up letter and the persona codified from the user persona mapping exercise, I will use empathy map to further dissect the corresponded action, feeling and thinking that the different plants’ human roommates might have so to further understand the evolution of relationship between human and plants and how that manifests in their everyday interaction.
2. Flip: Instead of multiplying different versions of storytelling, I have modified this stage from Candy and Kornet’s process to “flip”. Having garnered insights about human’s perspective on their relationship with plants, I am going to flip that perspective around and creatively inquire into the plants’ experience about the pandemic. How has the pandemic been for plants? Note that I am keenly aware that I will be doing this from my perspective as a human. The intention here is to provoke creative and generative imagination. In the process of creating plant characters.
3. Mediate: This stage is about translating the ideas about human-plant relationship and plant’s experience during the pandemic to a tangible experience. In this case, I have chosen to do an animated, episodic web series that follow several plants’ journey throughout the pandemic. Methods this stage include:
 - a. Character mapping and creation – I will pick several common houseplants, map out their natural qualities (where they come from, how to take care of them, what are their physical features) and start attaching some personalities

to them, and use the inspiration gathered from the previous steps to attach values, beliefs, and emotional pattern to them.

- b. Experience mapping and modeling – By asking “what if xxx happens” and coming up with a list of scenarios that might happen to houseplants during the pandemic, I map out plant characters’ experience, zoom into their daily pandemic lives, and distilling key milestones or events that might take place from their perspective.
- c. Scenario mapping and scripting – Using the key events or milestones generated in the last step, I map out the structure for the five-episode web series and start to script each of the scenarios.

Mount – the finished web series will be put on a digital platform for wide audience consumption. The Canadian Broadcasting Corporation (CBC) has confirmed to distribute this piece through their online channel. The journey, however, will not end by simply distributing the show. Rather, the circulating and socialization of the piece will be an important process to learn the impact of the research-creation, intended or unintended.

Ultimately, to create and mount a screen-based media production that recounts the experience of the COVID-19 pandemic from plants’ perspective and distribute it to a mass audience to consume at a time that the pandemic may still be the reality of our lives has epistemological and axiological implications. As media studies scholar Roger Silverstone argues, media supports us to make sense of our existence by “[providing] a framework for the conduct of social life and for the pursuit of security and identity.” (1999, p.99). It does that by establishing trust with audience, record and replay memories, and confront audience with the recognition of the other, that there is something out there in the society or the world that is not about us, not within our control, and yet has meaning and life (Silverstone, 1999). In this case, the other that will be foregrounded in the media production is the plants, and watching their experience during the pandemic will simultaneously recount the memories of the pandemic and put some safe distance between the audience and their potentially painful and stressful first-hand experience during the pandemic. But, as I will extrapolate in the next chapter on findings, what will emerge from learning about human-relationship is that it is our shared condition and interconnected transcorporeality with plants, which can

potentially illuminate us on what social order, individual identity and existential values might mean at a time that those are being disrupted. In the next two chapters, I will first highlight the findings and insights on human-plant relationship from the design research process, and then outline the making of *Plantemic*, rooted in the insights from the finding and informed by literatures outlined thus far.

Chapter 4. Findings and Analysis

The primary research method I used is conducting an anonymous online survey that asks participants to submit a love letter/breakup letter to one or more of their houseplants. Along with that, the survey requested participants to answer a set of demographic and plant related questions that would not reveal their identity. See the online survey attached as Appendix 1.

The goal here is to gather qualitative data that will allow for a deeper understanding of human-plant interaction and relationship during the COVID-19 pandemic. The insights from these data will also serve as an inspiration for the making of the design fiction.

In total, I gathered 20 responses with 19 letters submitted. See table below for a demographic breakdown of the participants.

Table 1: Breakdown of Demographic and Plant Related Questions from Online Survey

Demographic and plant related questions (multiple choice questions)	Answers
Do you currently live with houseplants?	100% answered Yes
How many houseplants do you currently live with? (multiple choice question)	16% answered 1-3; 47% answered 4-10; 47% answered more than 10
What kind of environment do you live in? (multiple choice question)	42% answered House/townhouse, 58% answered Condo/apartment; 0% answered Other.
What kind of neighbourhoods do you live in?	89% answered Urban; 0% answered Rural; 5% answered Suburban; 5% answered Other
Do you consider yourself a plant lover?	68% answered Yes; 16% answered Maybe; 16% answered No
Since the COVID-19 pandemic, have you gotten more plants?	53% answered Yes; 5% answered No, I have less plants since the pandemic; 42% answered No, same number of plants

These demographic and plant related questions showcase the kind of plant owners that this survey captured are ones that are mostly living in urban settings, either in house,

townhouse, condo or apartment. Over half the participants consider themselves as plant lovers.

The letters show a wide range of experience and emotional exchanges with plants. To better understand the modes of engagement the participants have with plants, I conducted a user persona mapping exercise by sorting the letters according to the level of experience that the participants have with plants, the level of emotional attachment they displayed with their plants, and the kinds of keywords they use to identify plants as. See below for a table that lists the four types of plants’ human roommates’ persona and notable quotes from the letters that associate with each persona. Note that I have opted for the term “plants’ human roommates” to describe the human participants, instead of “plant owners” or “plant care takers” that signify an asymmetric power dynamic between plants and human.

Table 2: Persona of Plants’ Human Roommates and Notable Quotes for Each Persona

Persona of Plants’ Human Roommates	Notable quotes from the love letters/breakup letters
<p>Plant Novices Plant owners who’re just starting out to give a try to planting.</p>	<p>“Dear spider plant, I’m sorry I never got around to naming you. I am amazed how well you’ve thrived through the pandemic” (participant lives in a condo/apartment in urban setting with 1-3 plants)</p> <p>“During quarantine, you and I were the only living beings in my apartment for months. You are a lesson in surviving the long weeks of deprivation of touch, shared food, laughter, community, art.” (participant lives in condo/apartment in urban setting with 1-3 plants)</p> <p>“But you, I just can’t figure out how to care for you or keep you looking alive and well. Should I toss you? Try to find you a better home? I’m perplexed. You’re starting to become a nuisance and now I’m questioning my plant ownership all together.” (participant lives in a townhouse/house in urban setting with 4-10 plants)</p>

<p>Plant Chefs</p> <p>Plant owners that are planting mainly for the purpose of harvesting plants that have a culinary usage.</p>	<p>“Spring onions, thanks for growing so fast every time I cut you and eat you. Thanks champ. As for the rest of you, be fruitful so I can have a belly full.” (participant lives in a townhouse/house in suburban setting with 4-10 plants)</p> <p>“Dear pepper plants, whether indoors beside me or within sight outdoors, I will always cherish you. Though, I do wonder what I might be able to do to make you spicier” (participant lives in a townhouse/house in other setting with 1-3 plants)</p>
<p>Plant Pals</p> <p>Experienced plant owners who see plants as their friends and roommates and cherish the relationship they foster with their plants.</p>	<p>“In a time of uncertainty, you invoke a sense of calm with your love of classical music and bring routine to my life with monthly watering. Did I mention that you are SO forgiving with me. When I forgot to water you or prune your dead leaves, you don't leaf me (hehe).” (participant lives in a condo/apartment in urban setting with more than 10 plants)</p> <p>“Dear spider plant, you were among my first plants, and I'm so proud of the plant you've become! You've seen me through many versions of myself and I'm really happy that we're both still well and thriving. :) Thank you for helping me through all of my transformations!” (participant lives in a condo/apartment in urban setting with 4-10 plants)</p> <p>“I am sorry for neglecting you. You were the beginning of a new joy in my life. I loved that you sparked something in me and I doted on you. I read books, watched videos and joined forum discussions to learn how to better take care of you and make you flourish. It was never tedious.” (participant lives in a condo/apartment in urban setting with 4-10 plants)</p>
<p>Plant Family</p>	<p>“I hope you know that I plan to live with you all for a long time and that you are the closest thing to children I will ever have.”</p>

Seasoned plant owners who considers planting part of their identity and are quite attached to their relationship with plants and get life inspiration from their plants	(participant lives in a townhouse/house in urban setting with more than 10 plants) “Know you have left the most profound impact on my life. You've been the consistent reminder that life continues to evolve and go on through all the craziness of this year. Taking care of each of you, while watching you grow everyday while the rest of the world came to a halt only helped show that I too was able to take the next step in my life” (participant lives in a condo/apartment in urban setting with more than 10 plants)
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With the exception of the persona Plant Chef, these four personas mark an increasing level of emotional attachment with plants and experience in planting (Plant Novice being the lowest level of emotional attachment and least amount of experience with plants, and Plant Family with the highest level of emotional attachment and highest amount of experience with planting).

Now that I have data on what the human participants say about their relationship with plants, I conduct an empathy mapping exercise, a method often used in interaction design (Gibbons, 2018), to look into how the different plants’ human roommates’ persona might act, think and feel corresponding to what they say as they live and breathe with plants.

Table 3: Empathy Map - Plants’ Human Roommates

Plants’ Human Roommates Persona	Act	Think	Feel
Plant Novices	Giving planting thing a try due to boredom or because they got gifted a plant. Learning about plant’s care routine	Am I doing this right? I am surprised by how well it grows This is fun This is hard	Surprise and delight Joy and Amazement Confused Nervous and uncertain

	<p>but still in the trial and error stage</p> <p>Not sure whether they should toss a plant once they kill a plant</p>		
Plant Chefs	<p>Grow plants that have culinary usage so to incorporate plants in cooking</p> <p>Improving care routine so that the plants taste better</p>	<p>Grow faster! More the merrier!</p> <p>I wonder what I need to do to make you fresher/spicier/tastier</p>	<p>Grateful</p> <p>Nourished</p> <p>Frustrated and impatient when the plants' don't harvest as fast as expected</p>
Plant Pals	<p>More experienced in taking care of plants and enjoy their company</p> <p>Appreciate plants' growth and their beauty</p> <p>Sometimes neglect plants and feels guilty about it</p> <p>Play music to plants and talk to plants from time to time</p>	<p>At least I have plants to be my roommates during this pandemic!</p> <p>Plants give me the structure I need to stay sane. Thank you plants.</p> <p>I am so sorry I neglected you, my friend.</p>	<p>Comforted, Joy, Stable, Inspired, Empathic, Guilty</p>
Plant Family	<p>Converse to plants and try to decipher what messages</p>	<p>I am learning from you that I too can be resilient and constantly evolving</p>	<p>Emotionally Attached</p> <p>Love and loved</p> <p>Inspired</p>

	<p>they are sending them</p> <p>Learn from plants</p> <p>Not just try to take care of plants but also constantly improving caring routine to showcase love</p> <p>Deriving their identity from being plant lovers and care takers</p> <p>Making major life decision based on the inspiration they got from plants</p>	<p>You're a source of inspiration for me!</p> <p>I love you, plants.</p>	
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What emerged from this exercise of mapping human's level of experience with humans is an existential and emotional journey that human embark on with their plant roommates during the pandemic.

Table 4: Stages of Experience with Plants for Different Persona

Persona Associated	Stages of Experience	Central Questions
Plant Novice Plant Chef	1. Navigating Existential Confusion and Complexity	Is my plant living/dying?
Plant Novice Plant Chef Plant Pals	2. Fulfilling Emotional Need	I appreciate the plant's existence and companionship
Plant Pals	3. Stepping into the Subjectivity of	I can take care and nurture my plants. There is meaning in what I do

	Caretaker (Enjoying Control)	
Plant Pals Plant Family	4. Letting Go of Control and Perfection	I care about my plants and I recognize that they also have a life on their own. They evolve and grow even when I neglect them.
Plant Pals Plant Family	5. Developing Co-Learning and Reciprocal Relationship	Like plants, I too can continue to grow and evolve, even when external factors are not going well

Starting from the stage of being a Plant Novice, a person can experience both positive and negative emotion in dealing with what seems like the complicated tasks of keeping their plants alive. Then gradually, as humans get acquainted with plants and gains confidence in their care routine, the complexity of keeping plants alive becomes an enjoyable process for humans to repeat in daily lives. They start to align them leaves as plant lovers, or Plant Pals. At this age, the level of control and attachment quickly increase. As one of the Plant Pal notes in their letter “plants give me the structure I need during this pandemic.”

But the beauty of the human-plant relationship really manifests when there are incidents that make the humans realize they do not have total control over plants. Some Plant Pals noted the times when they forget to water their plants and their plants continue to thrive. One Plant Family participant wrote how they meticulously embarked on this journey of using an organically made fertilizer but does not seem to have an impact on the plants’ health as they expected. Just like humans, plants live and breathe and potentially have a will on their own, for better or for worse. Coming to this recognition of plants’ aliveness, resilience and agency allows humans to let go of their sense of control and develop reciprocal and co-evolving relationship with plants. Such a relationship can inspire humans to reflect on their own existence. As one of the participants, poignantly remarked about plants’ role in their life:

You've been the consistent reminder that life continues to evolve and go on through all the craziness of this year. Taking care of each of you, while watching you grow

everyday while the rest of the world came to a halt only helped show that I too was able to take the next step in my life and it's through that I realized that I needed to come back home to Toronto. (L13, lives in a condo/apartment in urban setting with more than 10 plants)

In this human-plant relationship, the human recognizes that they provide care to plants, and in that act of providing care, they receive inspiration on how life organically. This sense of organic evolution is a remedy for the sense of dangerous status-quo that the pandemic presents. Indeed, if we compare this co-nurturing human-plant relationship with human-pandemic relationship, a stark contrast emerges. While the pandemic is a passive sign that signifies isolation, loneliness, instability, danger, stress, anxiety, and despair, plants are active agents that have a life on their own, and for the most part, bring about sense of comfort, stability, nourishment, and hope. Conversely, they can also wither and die without proper care or due to causes incomprehensible by their human roommates. In the letters collected, participants noted incidents of confusion, lament, and apologetic regret as much as they highlight moments of joy, unexpected delight, and amazement.

I argue that it is precisely this nature of evolving aliveness and fluidness that plants possess that allow them to activate a healing process for the stressed and potentially traumatized human subjectivity. Referring back to the process for healing trauma that psychologists Peter Levine and Ann Frederick outline, renegotiation from trauma requires a fluid and flexible process that allows us to transform from our reactions and responses to stress or traumatic triggers (1997). This can be countered-intuitive to our modern life structure, where we often focus on establishing structure, routines, and habits to maximize our productivity. Developing a relationship with plants helps to strike a balance between establishing structure and letting go of control. While plants do require consistent care routine, unexpected things can happen and no two plant lives are ever identical.

Attempting to try everything within our capacity while enjoying the good and bad surprises outside our control might just be the key to not just surviving the pandemic but cultivating a level of mindfulness with our collective existence. Recalling the imagery that psychotherapist Paddy Farr uses to describe our survival mechanism for the pandemic. In order for us to live through the existential anxiety presented by the pandemic, Farr argues, we must embody the absurd courage and persistence possessed by heroes in existential literature like Sisyphus in Albert Camus' *The Myth of Sisyphus*, who ceaselessly pushes a rock against an uphill slope (Camus, 1955; Farr, 2020). If combating with the existent angst

during the pandemic requires us to embrace Sisyphus' spirit of keep pushing a heavy rock upward, taking care and co-existing with plants allow us to broaden our field of vision beyond the big and heavy rock in front of us and notice the physical landscape around us and acknowledge the emotional landscape within us: there is more than just ceaselessly living as it is; it is ok that I am tired; I don't have control over everything, and look at this nice view on this hill!

When considering the framework of transcorporeality and embodied cognition, that our existence with plants are interlaced, and that our body has a direct impact on our cognition, the journey that our relationship with plants takes us on is visceral as much as it is metaphysical (Neimanis & Walker, 2014; Weik von Mossner, 2017). the physical presence of plants in the limited, social distanced space with us allow us to see, smell, touch, and in some cases, taste, lives that are evolving. Plants can nurture our body and in turn shift our mindset. Its physical needs also remind us our own body's needs. As the popular web comic account Pooily Drawn Lines illustrates in one of the comics it created during the pandemic, just like plants, we need water, sunlight, and sustenance (Farazmand, 2020). There is a physical parallel between human and plants in our transcorporeal existence. Such transcorporeality with plants also allow human to experience the present moment in a more fulsome manner and build an acceptance towards the non-linearity and subjectivity of time. Recalling the "quarantine paradox" that journalist Arielle Pardes observes, that during the pandemic, human's perception of time is warped as those of us who social distance at home feel that time passes very slowly but days seem to blend together, and those working at the frontlines feel the urgency of time as they problem solve through crises and yet the future horizon beyond the pandemic seems incredibly far away (2020). As the expectation for linear unfolding of time is disrupted, we as human learn from our plant buddies that indeed time is non-chronological. From the love letters/break-up letters submitted, participants noted the variance degree of needs, the impact of seasonality, and in short, the different timelines that each plant is living on. The concept of time varies from plant to plant and by extension varies from living being to living being. In nurturing a relationship with plants, humans also nurture a relationship with time itself, not as chronological, objective, and pre-determined, but as nonchronological, subjective, and dimension, aligned with the understanding of thick time Atrida Neimanis and Rachel Lowen Walker describe in the context of transcorporeality (2014).

In summary, if the COVID-19 pandemic reminds us the inevitable and inescapable end of death and makes us feel powerless, our relationship plants allows us to reimagine a narrative of hope and resilience, reproducing meaning while life seems to be meaningless. Our story with plants is not one a dystopian science fiction, warning us the worst is yet to come. It is also not a fairy tale, in which everything is unrealistically glossy. It is an intimate tale of existential realism with a dash of magic at times that allow as us to rejoice and reorient ourselves and meditate on our co-existence with plants.

How might one tell a story in a media production about this complex and endearing relationship? In the next section, I will take you through the process that I produce the research-creation.

Chapter 6. The Making of *Plantemic*

When approaching question of how to tell the story about the COVID-19 pandemic from an ensemble of plant characters' perspective, I think back to Roger Silverstone's arguments on the three dimensions on which media facilitates audience to make sense of social order and their identity: establishing trust, recording and recounting memories, and showing the experience of the others (1999). In this case, I intend for the plants characters to showcase both their unique plant traits and needs and also reflect some human-like personality that audiences can immediate resonate with and gain a sense of trust. The plants' encounters with the pandemic will serve a retelling of similar and yet different memories of the pandemic.

Therefore, when designing the plant characters and their daily experiences, I zoom both the similarities and differences between plant lives and human lives as they coinhabit under the same roof. See below for a Venn diagram (Figure 2) that compare and contrast some key experiences that humans and plants might be going through:

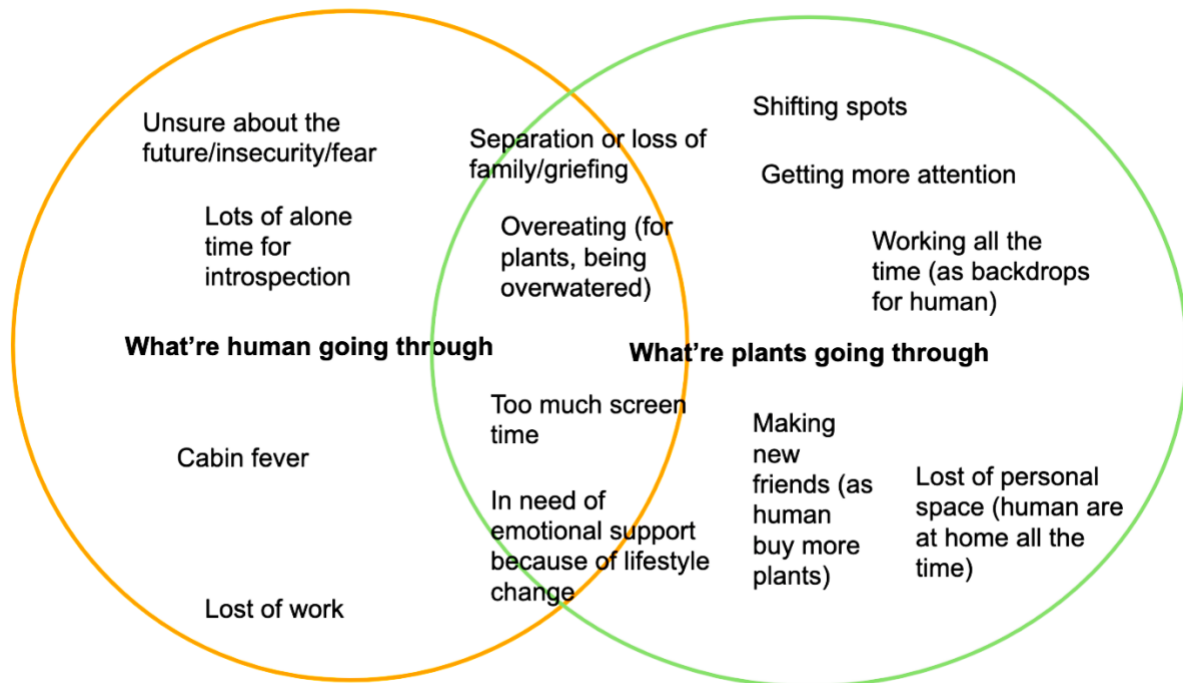


Figure 2: What Human and Plants are going through during the COVID-19 Pandemic

The events inside the plants' circle are my conjecture of what plants might be going through. In particular, I am focusing on houseplants who live inside an urban home, since

that is the one demographic that I have most personal understanding about and got the most data from the love letters/break-up letters collection.

Since most humans are social distancing at home, from a houseplant' perspective, they are entering a phase in life that they have never experienced: having humans around all the time, posing as backdrops for human's work calls, making new friends with new plants that humans have bought, and perhaps being overfed or underfed depending on their human friend's mood.

If these plants have a mind of their own, it is also possible that they might share some emotional ups and downs like their human friends when facing major lifestyle changes. Once I have a general overview of the comparison between human and plants' lifestyle changes, I move onto shaping up individual plant characters. Later, I will revisit modeling plants' experience during the pandemic in greater details and contextualized in each plant character's personality.

Character Creation

Before I could create the houseplant characters, I must first give them a home and a human friend. I would like the finished piece to reach a wide set of audience and be as inclusive of their plant experiences as possible, meaning that for that do not self-identify as plant lovers, they should still be able to engage with the piece and resonate. As such, I design the setting and the plant owner character to be representative of the most common type emerged from the love letters/hate letters, which is a plant owner who is mild plant lover living in a condominium in the urban setting. The person would fall under the Plant Pal persona that I identified earlier in the user persona analysis.

Recalling the literature that point out many millennials and Gen Z are houseplant lovers, I also want to nod to that phenomenon and have the plant owner character to be under that age bracket. I also take some of my personal background details to be the character's backstory. What emerges is a young, Asian Canadian woman plant owner who is living on her own for the first time and seeking a life of independence. Her plants are truly her sole companions during this pandemic. See below for a detailed character description.

Liz Chang is an Asian Canadian working professional in her late 20s who lives alone in Toronto. Her family lives in the suburbs, and Liz moved out a year ago to develop an independent life. She is a responsible plant owner and adores her plants, but she is not a plant fanatic. As the pandemic hits, like many other single young people

living in the city, she works from home, starts new hobbies (cooking and exercising), and has occasional breakdowns while social distancing.

The plant characters live with Liz in her one-bedroom condo and are diverse in their plant types and personality. Some of the key metrics that guide me to conceptualize the plant characters are:

- The characters must represent a diverse ensemble that have different care routines and needs.
- The plant types are common enough that most audience members will be able to understand the particular about their physique, personality and care routines.
- The plant characters' personality and responses should be reminiscent of different personalities and responses human might have, especially when living through the pandemic.

In the first iteration of brainstorming, the several plant characters that I land on are as followed:

Table 5: Types of plants for characterization

Types of plants	Rationale for choosing
Pancake plant	A popular plant in recent years that looks fairly easy to take care of but can also wither without enough light or water. It can be a good contrast to the cactus plant.
Cactus	A very common plant that is well recognized and also very resilient. Its thorns is a good physical trait that can be manifested into a distinctive personality.
Air plant	A very particular kind of plants that is popular among young people and always seems mysterious as it doesn't need soil or water. Can potentially bring about very funny moments.
Green Onion plant	An edible plant that some of the letter participants noted they started growing since the pandemic. Green onion plant grows fast

	and is not demanding in terms of its care routine.
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To brainstorm personalities for each of the plants, I start to attach some of the experiences that I map out for plants to these initial characters, a process that involves mapping and free-writing to tease out the personality and back story for these characters. See Appendix 2 for the initial character mapping board.

From this iterative process, I want to create personalities for the plants so that they can respond to the pandemic in their unique ways that are also representative of how human respond to the pandemic differently. For instance, a contrast can be set up between the Pancake Plant and the Cactus. Whereas the pleasant-looking pancake plant can be an extrovert, socialite type character who enjoys the company of humans staying at home during the pandemic, the cactus, with its thorny presence, can be an introvert who looks tough on the outside, but is internalizing complex emotion and existential anxiety its personal space is stripped away with the human staying at home all the time. To add in a dosage of humour, the tiniest plant in size, the air plant, shall be the oldest in age and is representative of an older generation of people who seem to think they can live through anything in life and only start to when the threat of the pandemic becomes palpable.

The green onion plant is the most self-reflective of the pandemic times among the main characters. It is a plant that Liz the plant's human friend only starts to grow since the beginning of the pandemic, and I decide that the green onion plant will lose its memories every time it gets cut for harvesting as food. This dramatization of its beheading and loss of memories foreground the existential nature of the show and allows for rooms for the plants to self-reflectively comment on the meaning of life and (near)death. In the plot creation process, I will further extrapolate on how the green onion character plays a central role in bringing out the piece's self-reflective, existential commentary.

As I started to shape up the personalities for these main characters, I also add two supporting plant characters that are not necessarily the drivers of the plot, but rather a vehicle for unfolding a pandemic story. The two characters are: 1) a snake plant who is originally an office plant that works for a therapist but now is working from home and has to deal with other home plants who are amateurish in posing as background plants for human's remote work calls; 2) a fake pot of flowers who is in stark contrast with the other

plants who are experiencing emotional ups and downs during the pandemic and consistently does a great job in posing as a background plant. These two plants add a level of critique on capitalistic productivity to the piece: a working professional snake plant and a pot of fake flower. On the one hand, the snake plant is a living plant that has been conditioned to the structure of 9-5 working environment and therefore has difficulty adapting to a less structured schedule. When such adjustment difficulty happens to a plant, it comes off funny and ironic. But when paralleling that to the experience of human, there is something to be said about the ways our bodies and mind are so conditioned for the structured 9-5 work life. The pot of fake flowers, on the other hand, is representative to the efficient, mass-produced convenience and we as human often surrender to and inadvertently become further disconnected from nature.

Bringing all these together, I consolidate the characterization for all the characters and design personalities and quirks for them. See Appendix 3 for a detailed character table that includes all the characters' names, types, descriptions of personality, and hobbies and see below (Figure 3) for an illustration done by illustrator Joyce Hui for the ensemble of plant characters:

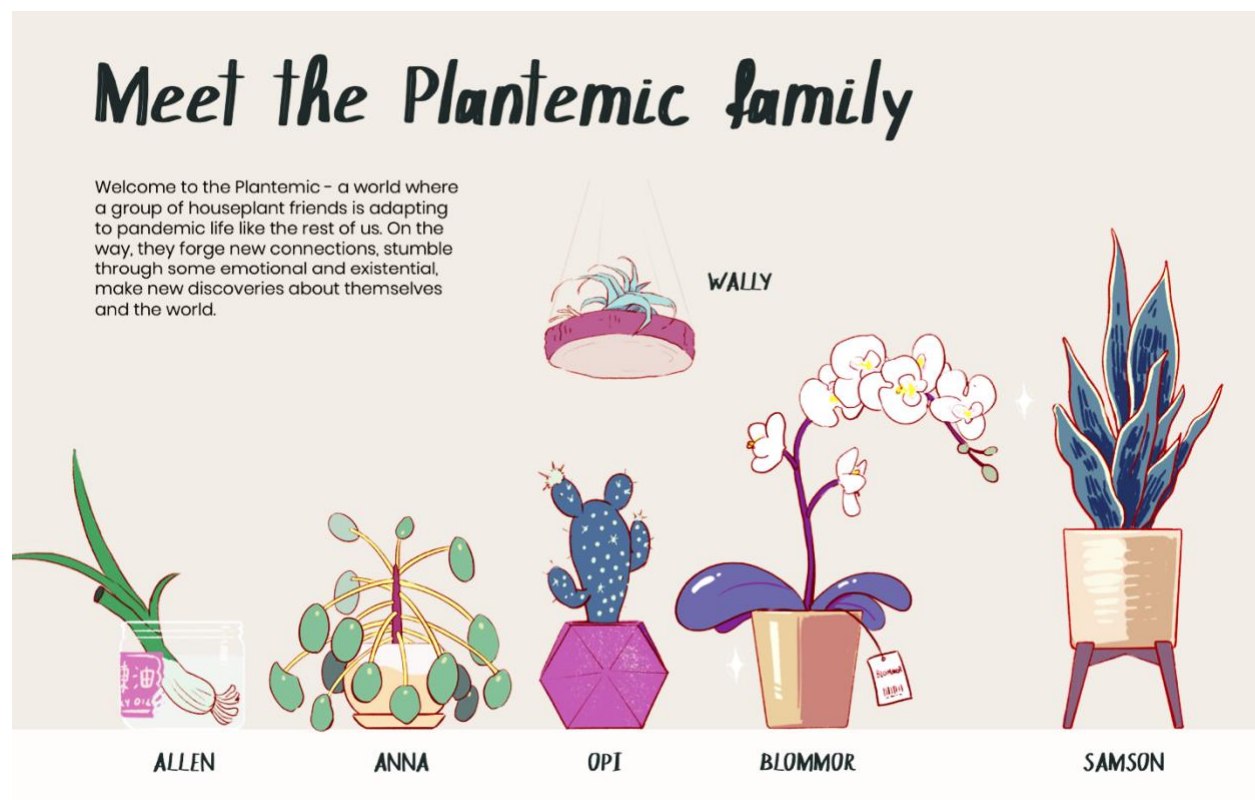


Figure 3: Meet the Plantemic Family

In partnership with FilmLoft Media Inc., a Toronto based film production company, I am in the process of collaborating with a production team to further developed these characters into animated characters. See Appendix 6 for the most updated character sheet with character illustrations done by illustrator Joyce Hui.

Scenario and Plot Creation

When it comes to creating scenario and plot for the web series, I develop the structure for the plot after ideating and modeling the characters’ experience in their everyday dealing with the pandemic. My intent is for the show to be an episodic sitcom that is at time healing and nostalgic and at times highly self-reflective on the pandemic times that we are living in. Each episode will be roughly 2-5 minutes long and features a scenario that is representative of the plant’s experience living through the pandemic.

To create an ensemble comedy piece, I zoom into the plants’ response and reaction to events that might happen as the pandemic break out and prolong. I imagine their response and reaction based on their plant types (their physical need) and their personalities (their emotional need). Essentially, this is a process of heuristic mapping and creation exercise. I asked a series of “what if” questions, ranging from daily events such as “what if the plants get underwatered/overwatered” to more dramatic incidents including “what if the plant owner has to leave the condo for a while because one of her family got the COVID-19.” This process is generative and iterative and allows the dynamic between the plants to emerge organically. See the plant experience modeling chart attached in Appendix 4.

This experiencing modeling exercise allows me to locate several key changes and events that the plants can be potentially facing when the pandemic takes place. These key events are the anchors for each of the episode.

Table 6: Episode Structure for Plantemic

Episodes	Key Events	Key Themes
1	The pandemic has just happened. Exploring the different plants’ perspective on the pandemic and welcoming Allen the green onion plant as a new member of the family.	Initial reaction and response to crisis or change in lifestyle Friendship and connection in time of pandemic.

2	Some of the plants start working as background decorations for Liz's remote work call. For the first time, some of them have a job and clear purpose? What does that look like?	The meaning of work and how productivity has to be re-evaluated How time is experienced differently during the pandemic
3	As Blommor the potted fake flowers arrive, some of the plants got "laid off". They have different response to this job loss.	The loss of purpose/direction Meaning of productivity versus leisure
4	Liz is called away for two weeks because her family has a COVID emergency, how are the plants going to respond to this near-death, waiting period?	Fear of death and abandonment Hope, resilience, and community in the face of crisis
5	As Liz returns to the condo, the plants must say goodbye to Allen the green onion plant, who is now very grown up and has established many fond memories with the other plants, but will be inevitably facing another loss of memories after being cut. The plants farewell with Allen.	Connection and intimacy in times of pandemic The existential significance of memories

As outlined in the table above, each episode has an anchoring event, several central themes, and from episode to episode, there is a continuity for plot and character development. The episodes can be viewed in chronological order or as stand-alone pieces. See Appendix 5 for the initial plot brainstorming chart that will give a sense of the initial design of the plot arc.

In the process of scripting, I am very purposeful in integrating a sense of playfulness and humour in each exchange among the plants, starting from their initial discussion of how their view of the pandemic differs. See below for a script excerpt from episode 1:

OPI THE CACTUS (serious): I move that we have an emergency meeting about the pandemic. It's been a week and the situation is only getting worse.

WALLY THE AIR PLANT (dismissively): Ah. Relax, Opi. We're plants. We won't get infected.

ANNA THE PANCAKE PLANT (excitedly): I love having Liz at home all the time. The plantemic is awe--some.

OPI (impatiently): Anna. Stop calling this the plantemic!

ANNA (startled): Ohhhhh. You don't like that. How about we call it the "corona party"? Like those beers in the fridge. It's perfect. Liz brought us a new roommate yesterday. Let's throw a party!

Here, the humorous exchanges among the plants does not only serve to provide audience a comic relief, but also to bring forward different takes on the pandemic, some worried, some relaxed, and some completely internalize it from their plant logic.

One key theme throughout the episodes is the exploration of meaning in life. This is most readily visible in the plot development associated with Allen the green onion plant. As a plant that loses his memories every time he gets cut and harvested for culinary usage, he oscillates between being an innocent young child and a self-reflective adult. He reaches his adulthood when he first came to the plants' home, but before he gets acquainted with his new friends and new living environment, he gets cut for the first time and snaps into his innocent child state. He reaches his most grown state in episode 4, when Liz leaves the condo for an extensive period of time due to a COVID emergence with her family. To dramatize Allen's self-reflectivity and leverages him to offer existential commentary, I design him so that he takes on the aura of a Shakespearean poet who delivers passionate soliloquy on the meaning of life when the other plants are all fearful of the potential threat of death. See below for an excerpt from his soliloquy:

ALLEN:

Yesterday, Yesterday, Yesterday.

Sips in this petty pace from plant to plant.

From the first stem of remembered time.

But all of our tomorrow will be lighted with hope.

The path from every rebirth.

Come! Come! The cycles of life.

Life is not gloomy shadow.

It's a tale told by our togetherness. Full of leaves
And flowers.

Signifying something out of nothing.

I adapted this soliloquy of Allen the green onion plant from the famous tomorrow soliloquy from Shakespeare's *Macbeth* and completely turned it around on its head. See below for the original passage from *Macbeth* for a comparison:

Macbeth:

Tomorrow, and tomorrow, and tomorrow,
Creeps in this petty pace from day to day,
To the last syllable of recorded time;
And all our yesterdays have lighted fools
The way to dusty death. Out, out, brief candle!
Life's but a walking shadow, a poor player,
That struts and frets his hour upon the stage,
And then is heard no more. It is a tale
Told by an idiot, full of sound and fury,
Signifying nothing.

(Shakespeare, trans. 2005, 5.5.17-28)

Not unlike Macbeth's soliloquy, Allen's soliloquy is meant to be a rhetorical meditation on what is the meaning of life and lived time. Unlike Macbeth's lament on life is nothing but "a tale told by an idiot, full of sound and fury, signifying nothing," Allen the green onion plant, despite his short-lived life cycle and memories, comment on life's aliveness and tomorrow's hope, filled by solidarity of the plants. In the adapted last line of the soliloquy, "signifying something out of nothing," it is important that Allen recognizes the absurd nature of life and celebrates the meaning that they are able to produce out of that nothingness. Such a reflection captures what I uncovered as the significance of human-plant relationship, a site for reproduction of meaning, connection, comfort, hope, and the desire to go on.

Without spoiling the ending of the show, I shall end this chapter by noting that the through line in *Plantemic* will very much echo to the hopeful tone permeated in the selected excerpts above. Ultimately, I look forward to engage audience with a playful and mediated experience that bring about similar affects as live plants would, acknowledging the existential angst we are collecting living through during the time of pandemic and encouraging all of us to go on, like our plants shall go on.

Chapter 7. Conclusion

It was the summer of 2020 when I started my journey of conceptualizing this research and research-creation project. Like many people, I was trying to make the best out of the pandemic summer: staying active, enjoying the summer weather, and propagating my fast-growing plant friends.

By the time that I write this chapter, it is already winter. Between summer and winter, there has been a roller coaster of ups and downs. I have had my fair dosage of anxiety and stress. At times, like many others social distancing at home, I wonder when we will see the end of the tunnel. Rumours of a vaccine has been flashing on headlines, while the daily number of COVID cases has not yet winded down in Ontario, Canada.

Amidst all this, this project is a beacon of hope that I have hold on to and hold dear to my heart.

Because of this world that I have created with my plants, when existential angst knocks on my door, I am able to hold onto the ideas that I have explored throughout this journey: the transcorporeality of lives soothes me, that actively recognizing that human is not only alive specie, and we have an interconnectedness with our land and nature; the concept of embodied cognition, that taking care of our body will influence how we think; the role of playful creativity, that if there is no foreseeable end to the pandemic, why not put all my energy into a creative project like *Plantemic*?

Through such a playful, generative, and interdisciplinary exploration of human-plant relationship during the COVID-19 pandemic, I have embarked on a philosophical inquiry on how might human-plant relationship support us to make sense about ourselves and our collective existence at a time that we experience stress and disorientation. Looking into discourses in cultural studies, media studies, design, psychology and psychotherapy and studying the works by Levine, Frederic, Silverstone, and Weik von Mossner, I also have explored the ways in which light-hearted media storytelling about human-plant relationship can potentially activate a process of healing and reorientation of meanings and values.

Through design research methods including collecting love letters and breakup letters penned by human participants addressed to plants, I uncover a narrative between human and plants in developing a reciprocal relationship that support human to gain a sense of connection and ultimately resilient acceptance that allows them to let go of control and cherish the serendipity and simple pleasures in living through the present. The human-plant

narrative is neither a grim existential tale like the Myth of Sisyphus nor is it a fairy tale ungrounded in reality. It is a tale that dissolves the often-assumed dichotomy between accepting existential realism and generating the desire to live meaningfully.

The human-plant narrative inspired the creation of *Plantemic*, an episodic, comedic web series that recount the daily encounters of lives during the COVID-19 pandemic from houseplants' perspectives. I created a set of plant characters that are representative of a diverse set of personalities and will respond to the pandemic in their unique and playful ways, with some of them providing an existential reflection on this uncertain time and deliver a message of hope to the audience.

The journey of this project and with the pandemic does not end here. For the next steps, the characters and scripts I created for *Plantemic* will be further developed in storyboards and eventually animated for a 5-part web series. I will be collaborating with a team of artists, animators and filmmakers to finish and mount the show. As I write this, I am not certain that by the time the show comes out via the online platform of the Canadian Broadcasting Corporation (CBC) in mid-2021, what might be the condition we live in. It is possible that we will still be wallowing in the prolonged pandemic, in which case, I hope the series will serve as a therapeutic relief and propels humorous reflection. It is also possible that we will all have received vaccines and slowly transition to the post-pandemic world, in which case, I hope this series will serve as a re-enactment of memories and reminder of what we have learned from this global crisis – that we need to cherish our interconnectedness with nature and our surrounding environment, and that our wellbeing matter over the endless pursuit of maximized productivity.

To end this research report, I would like to point out several areas that I start exploring but would look forward for further research to be done on, especially if and when we transition to the post-pandemic world:

1) The role of speculative design/design fiction/futurist storytelling

As I mentioned in the methodology chapter, while I align myself with the spirit of design fiction creators/speculative designer/experiential futurists to broaden the horizon of our outlook on the future, I purposely departed from their approach of trying to distill imaginations of possible futures solely human subconsciousness and call for a non-linear understanding of time and a way of storytelling that is mindful of the existential and emotional crisis we are facing. In this process, I explored the role of humour and brought in the literatures from trauma studies and affect theory in

media studies. As we further navigate the pandemic and post-pandemic world, there is an urgency for designers and futurists to rethink their usage of storytelling. Yes, the possible futures are important and seeing those in stories will potentially will alter actions in our present. But what responsibility do we bear as designers and storytellers when we think about our immediate present, and what knowledge can we uncover by being mindful of alternative understanding of time such as the “thick time” concept discussed by scholars Neimanis and Walker in the context of transcorporeality (2014)?

2) Human-plant co-existence and its implications in the post-pandemic world

Our interlaced co-existence with plants has guided me in every step of the way in this research and research-creation project. Inspired by the works on transcorporeality and ecological thought, I have explored that if we consider the plants as our equal living companions that have lives, emotions and perspectives on their own, what might emerge. The love letters/break-up letters gathered in this project has brought forward the intimacy and connection that human and plants can bring for each other, especially in a time that social connection is scarce. In the literature review, I also scanned the literatures on the health-related benefits of being in touch with plants and nature in general. Needless to say, plants are fantastic friends of humans and they have done so much for us, before and during this pandemic. In light of the climate emergency, there is urgency for us to think about what have we done for plants and what have we done for nature? How can we move beyond thinking plants, nature, and by extension, the environment are passive things or sites that we do things do and can change without their active participation, and shift our mindset to ask how might we collaborate with our plants and nature?

I sincerely hope that this question how might we collaborate with nature becomes more of a priority than how might we restore the pursuit of productivity and results in the post-pandemic world. I also hope that when *Plantemic* comes out to the world, it can in part inspire some more appreciation and understanding of plant and nature’s roles in our lives. It is only by recognizing that human existence is not all that there is, and we as human are not the central holders of time, that our existence can regain meaning, hope, and desire. As Allen the green onion plant from *Plantemic* would say, “life is a tale told by our togetherness, full of flowers and leaves, signifying something out of nothing.”

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Appendices

1. [Online Survey Form: Lives with Houseplants during the COVID-19 Pandemic](#)
2. [Initial Character Mapping Board](#)
3. [Plantemic – detailed character table](#)
4. [Plantemic – plant character experience modeling chart](#)
5. [Plantemic – initial plot brainstorming chart](#)
6. [Plantemic – character illustrations](#)